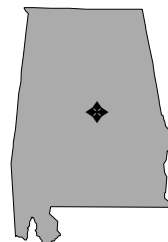


Size: 2,257 acres
Mission: Manufactured explosives
HRS Score: 36.83; placed on NPL in July 1987
IAG Status: Federal Facility Agreement signed in December 1989
Contaminants: Nitroaromatic compounds, heavy metals, and munitions-related wastes
Media Affected: Groundwater, surface water, sediment, and soil
Funding to Date: \$57.4 million
Estimated Cost to Completion (Completion Year): \$3.1 million (FY2000)
Final Remedy in Place or Response Complete Date for BRAC Sites: FY2000
Final Remedy in Place or Response Complete Date for Non-BRAC Sites: FY1983



Childersburg, Alabama

Restoration Background

Environmental studies conducted since FY83 at the Alabama Army Ammunition Plant have identified various sites as potential sources of contaminants. Prominent site types include a former ammunition production and burning ground for various explosives; industrial wastewater conveyance systems, ditches, and a red water storage basin; landfills; underground storage tanks; polychlorinated biphenyl (PCB)-containing transformers; and a former coke oven.

Remedial Investigation and Feasibility Study (RI/FS) activities, which began in FY85, are ongoing. The installation was divided into five operable units (OUs): Area A OUs 1 and 2 and Area B OUs 1, 2, and 3. The RI confirmed that groundwater, surface water, sediment, and soil are contaminated with nitroaromatic compounds, heavy metals, and explosives waste.

In FY88, the Army excavated contaminated soil at the burning grounds at Area A and transported the soil to Area B to await a final decision on treatment or disposal. In FY90, the Army and regulators signed a Record of Decision (ROD) for Area B. The ROD incorporated a generic remedy, including on-site incineration of stockpiled contaminated soil.

In FY94, the Army initiated a follow-on installation-wide RI, which included installing monitoring wells and conducting soil borings; resampling existing monitoring wells; and collecting background samples, soil and sediment samples, surface water samples, and ecological samples. The Army also completed incineration of the stockpiled contaminated soil, as prescribed in the ROD, and formed a BRAC cleanup team (BCT).

In FY95, the Army attempted to establish a Restoration Advisory Board (RAB) but received no applications for RAB membership. In

addition, in FY95, the Army and regulators approved the Area A RI/FS.

The Army initiated partnership efforts with EPA and the state regulatory agency. These efforts resulted in concurrence on the CERFA report and signing of four interim RODs. Partnership meetings also produced an Installation Management Plan, which establishes the course of action for installation cleanup through FY99.

In FY96, the Army completed a Proposed Plan and a final ROD for Area A. The installation identified an additional OU for Area B (OU4), which includes all remaining lead- and explosives-contaminated soil at the plant. An interim ROD was initiated for Area B OU4. The ROD calls for soil removal, incineration of explosives-contaminated soil, and solidification of lead-contaminated soil.

In FY97, the Army and regulators approved the final ROD for Area A and completed the Remedial Action (RA) for Areas 13 and 14. The BCT began delisting procedures for Area A. Approval for the designation of 1,285 acres as CERFA-uncontaminated was granted by the appropriate regulatory agencies. The Army continued the incineration of explosives-contaminated soil at OU3 and OU4 and constructed an additional disposal cell for the remaining contaminated soil.

FY98 Restoration Progress

The installation completed RAs for all lead- and explosives-contaminated soil; it incinerated 165,000 tons of explosives-contaminated soil and solidified 50,000 tons of lead-contaminated soil. All equipment was decontaminated, dismantled, and removed from the site. The installation designed the engineered cap for Landfill 22 and obtained regulatory approval for the cap. Completion of the RI at Area B was delayed for gathering of additional groundwa-

ter information. The EPA and Alabama Department of Environmental Management approved the closeout report for Area A, and delisting procedures for the area continued.

The Army successfully used electrical tomography to trace explosives-contaminated groundwater conduits through highly fractured/ weathered limestone bedrock.

Plan of Action

- Develop a land use control assurance and implementation plan in FY99
- Continue investigation of Area B by conducting quarterly groundwater monitoring, surface water and sediment sampling, a dye trace study, and a pump test in FY99
- Complete the RI/FS for surface soil, sediment, and water for Area B in FY99
- Close 35 existing monitoring wells in FY99
- Complete the engineered cap for Area 22 in FY99
- Complete the closeout report for OU3 and OU4 in FY99
- Complete NPL delisting procedures for Area A in FY99

Sites Achieving RIP or RC Per Fiscal Year

